

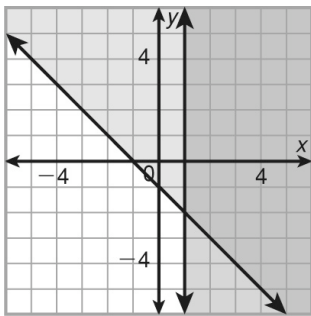
Geometry Chapter 2 Practice Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. What is the value of $2(8 - 13)$?
A 10 C 3
B -10 D -3
- _____ 2. Which is the solution to the equation $6 - 5x = 3x + 22$?
F -3.5 H 8
G -2 J 14
- _____ 3. Petra received the following scores on her spelling quizzes:
6, 9, 10, 10, 9, 10.
What is her mean score?
A 7 C 9
B 8 D 10
- _____ 4. What is the value of k if $k + (-11) = -4$?
F 15 H -7
G 7 J -15
- _____ 5. Which expression is equivalent to $8r - 5(r - 1)$?
A $3r - 1$ C $3r + 5$
B $3r - 5$ D $3r$
- _____ 6. Solve $m^2 = 16$.
F 8 H 4
G -8 and 8 J -4 and 4

_____ 7. Which system represents the graph?



A $\begin{cases} y \leq -x - 1 \\ x \geq 1 \end{cases}$

B $\begin{cases} y \geq -x - 1 \\ x \geq 1 \end{cases}$

C $\begin{cases} y \leq -x - 1 \\ x \leq 1 \end{cases}$

D $\begin{cases} y \geq -x - 1 \\ x \leq 1 \end{cases}$

_____ 8. What is the value of $2^3 \cdot 3^3$?

F 18

G 54

H 125

J 216

_____ 9. Which is the factored form of $x^2 - 5x - 14$?

A $(x - 5)(x - 14)$

B $(x - 7)(x + 2)$

C $(x + 5)(x - 14)$

D $(x + 7)(x - 2)$

_____ 10. What is the solution to the equation $9(2 - x) = 0$?

F -18

G 0

H 2

J 18

_____ 11. What is the distance between the points $(6, -7)$ and $(1, 5)$?

A 13

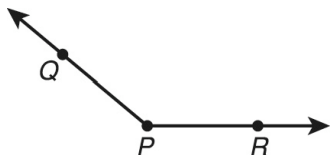
B $\sqrt{13}$

C $\sqrt{53}$

D $\sqrt{119}$

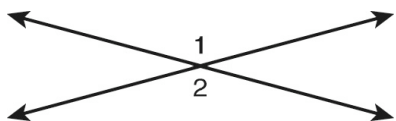
- _____ 12. Which tool is NOT used to construct congruent segments?
- | | |
|-----------|----------------|
| F ruler | H straightedge |
| G compass | J pencil |

- _____ 13. Which is NOT a name for the angle?



- | | |
|----------------|----------------|
| A $\angle P$ | C $\angle QPR$ |
| B $\angle PQR$ | D $\angle RPQ$ |

- _____ 14. Which completes the sentence?
 $\angle 1$ and $\angle 2$ are _____ angles.



- | | |
|-----------------|-----------------|
| F adjacent | H supplementary |
| G complementary | J vertical |

- _____ 15. What is the circumference to the nearest tenth of a millimeter, of a circle whose radius is 40 mm?
- | | |
|------------|------------|
| A 62.8 mm | C 188.5 mm |
| B 125.6 mm | D 251.3 mm |

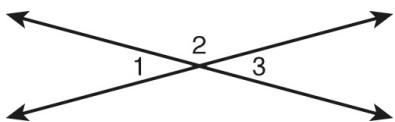
- _____ 16. The midpoint of a segment is $(-9, -1)$. One endpoint of the segment is $(2, -5)$. What are the coordinates of the other endpoint of the segment?

- | | |
|---------------|--------------|
| F $(-16, -7)$ | H $(13, -9)$ |
| G $(-20, 3)$ | J $(-5, -6)$ |

- _____ 22. Which biconditional is false?
- F A person is eligible to attend the club meetings if and only if that person is a member of the club.
 - G A person can practice medicine in the United States if and only if that person has a valid medical license.
 - H A person can legally drive a car if and only if the person holds a valid driver's license.
 - J A student participates on the football team if and only if the student maintains at least a B average.

- _____ 23. **Given:** $\angle 1$ and $\angle 2$ are supplementary; $\angle 1 \cong \angle 2$
Prove: $\angle 1$ is a right angle.
 In a two-column proof, which is the statement in the final step?
- A Given
 - B $\angle 1$ and $\angle 2$ are supplementary.
 - C $\angle 1$ is a right angle.
 - D Definition of right angle

- _____ 24. **Given:** $m\angle 1 = (60 - x)^\circ$, $m\angle 3 = x^\circ$
Prove: $m\angle 2 = 150^\circ$



Proof: By the Vertical Angles Theorem, $\angle 1 \cong \angle 3$, so $60 - x = x$. Then, $60 = 2x$ by the Addition Property of Equality. By the Division Property of Equality, $30 = x$, or $x = 30$. Since $m\angle 3 = 30^\circ$ and $\angle 2$ and $\angle 3$ form a linear pair, $30^\circ + m\angle 3 = \underline{\hspace{2cm}}$. By the Subtraction Property of Equality, $m\angle 3 = 150^\circ$. What information completes the proof?

- | | |
|---------------|---------------|
| F 90° | H $m\angle 1$ |
| G 180° | J $m\angle 2$ |

- _____ 25. Which is the next number in this pattern?
 0, 1, 1.5, 1.75, . . .
- | | |
|---------|--------|
| A 2 | C 1.85 |
| B 1.875 | D 1.8 |

Geometry Chapter 2 Practice Test Answer Section

MULTIPLE CHOICE

- | | | | |
|--------------------------|--------|--------|---------------------------------|
| 1. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 2. ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 3. ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 4. ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 5. ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 6. ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 7. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 8. ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 9. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 10. ANS: H
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 11. ANS: A
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 12. ANS: F
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 13. ANS: B
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 14. ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 15. ANS: D
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 16. ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 17. ANS: A
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 18. ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 19. ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 20. ANS: F
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 21. ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |

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|-----|----------------------|--------|--------|---------------------------------|
| 22. | ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 23. | ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 24. | ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |
| 25. | ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 2 |